



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

August 9, 2021

Mr. Scott Thompson, Executive Director  
Oklahoma Department of Environmental Quality  
P.O. Box 1677  
Oklahoma City, OK 73101-1677

SUBJECT: OKLAHOMA PERIODIC MEETING SUMMARY 2021

Dear Mr. Thompson:

A periodic meeting with Oklahoma was conducted virtually on March 30, 2021. The purpose of this meeting was to review and discuss the implementation of Oklahoma's Agreement State Program. The U.S. Nuclear Regulatory Commission (NRC) was represented by Mary Muesle, Director, Division of Nuclear Materials Safety, and Jacqueline D. Cook, Regional State Agreements Officer, from the NRC's Region IV office. Also attending were Lizette Roldan-Otero, PhD, Chief, Materials Inspection Branch, Heather Gepford, PhD, Chief, Materials Licensing and Decommissioning Branch, and Randy Erickson, Regional State Agreements Officer, also from the NRC Region IV office.

I have completed and enclosed a general meeting summary. If you feel that our comments, conclusions, or actions to be taken do not accurately summarize the meeting discussion, or have any additional remarks about the meeting in general, please contact me at (817) 200-1132 or via email at [Jackie.Cook@nrc.gov](mailto:Jackie.Cook@nrc.gov) to discuss your concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Randy Erickson".

Erickson, Randy signing on behalf  
of Cook, Jacqueline  
on 08/09/21

Jacqueline D. Cook  
Regional State Agreements Officer

Enclosure:  
Periodic Meeting Summary for Oklahoma

OKLAHOMA PERIODIC MEETING SUMMARY 2021 DATED-AUGUST 9, 2021

**DISTRIBUTION:**

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INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM

PERIODIC MEETING WITH THE STATE OF OKLAHOMA

TYPE OF OVERSIGHT: NONE

March 30, 2021

Enclosure

## PERIODIC MEETING PARTICIPANTS

### **NRC**

- Mary Muessle: Director, Division of Nuclear Materials Safety, NRC Region IV
- Lizette Roldan-Otero, PhD: Chief, Materials Inspection Branch, NRC Region IV
- Heather Gepford, PhD: Chief, Materials Licensing and Decommissioning Branch, NRC Region IV
- Jackie Cook: RSAO, NRC Region IV
- Randy Erickson, RSAO, NRC Region IV

### **State of Oklahoma**

- Mike Broderick: Radiation Control Program Director
- Cristi Andrews: Attorney
- Michelle Brewer: Environmental Programs Specialist IV
- Jennifer McAllister: Environmental Programs Specialist IV
- Michael Reid: Environmental Programs Specialist IV
- Kevin Sampson: Environmental Programs Specialist IV

## 1.0 INTRODUCTION

This report presents the results of the periodic meeting held virtually between the U.S. Nuclear Regulatory Commission (NRC) and the State of Oklahoma. The meeting was held on March 30, 2021 and was conducted in accordance with Nuclear Materials Safety and Safeguards (NMSS) Procedure SA-116, "Periodic Meetings between IMPEP Reviews," dated June 3, 2009.

The Oklahoma Agreement State Program is administered by the Radiation Management Section (the Section) which is located within the Land Protection Division (the Division). The Division is part of the Department of Environmental Quality (DEQ).

At the time of the meeting, the Oklahoma Agreement State Program regulated 224 specific licenses authorizing possession and use of radioactive materials. The meeting focused on the radioactive materials program as it is carried out under the Section 274b. (of the Atomic Energy Act of 1954, as amended) Agreement between the NRC and the State of Oklahoma.

The Section is funded by user fees and federal grants. Although the Program's budget was reduced in early 2020, the Section's program was unaffected.

The Program's last Integrated Materials Performance Evaluation Program (IMPEP) review was from September 24-28, 2018. That report is in the NRC's Agencywide Documents Access and Management System (ADAMS) under Accession [ML18331A351](#). A Management Review Board (MRB) meeting to discuss the outcome of the IMPEP review was held on November 20, 2018.

During the November 20, 2018 MRB meeting, Oklahoma's performance was found to be satisfactory for all performance indicators reviewed. The team recommended, and the MRB agreed, to close the recommendation from the 2014 IMPEP review.

Accordingly, the team recommended, and the MRB agreed, that the Oklahoma Agreement State Program be found adequate to protect public health and safety, and compatible with the NRC's program. Based on the results of the current IMPEP review which was the second consecutive IMPEP review with all performance indicators found satisfactory, the team recommended, and the MRB agreed, that the next full IMPEP review take place in approximately 5 years with a periodic meeting to be held in approximately 2.5 years.

Below is the team's recommendation, as mentioned in the 2018 Final Oklahoma IMPEP Report and as mentioned in this report, for evaluation and implementation by Oklahoma:

Oklahoma should develop a strategy to address the contributing factors for issuing delinquent inspection documentation and assure that inspection documentation is issued within 30 days. (Section 2.2).

## 2.0 COMMON PERFORMANCE INDICATORS

Five common performance indicators are used to review the NRC's Regional Office and Agreement State radioactive materials programs during an IMPEP review. These indicators are: (1) Technical Staffing and Training, (2) Status of Materials Inspection Program, (3) Technical Quality of Inspections, (4) Technical Quality of Licensing Actions, and (5) Technical Quality of Incident and Allegation Activities.

### 2.1 Technical Staffing and Training (2018 IMPEP Rating: Satisfactory)

The Section is comprised of 10 staff members which equals approximately 6.0 full time equivalent for the radioactive materials program when fully staffed. Currently, there is 1 Section Manager, 8 technical staff who perform inspections and issue licensing actions, and 1 administrative assistant. Since the 2018 IMPEP review, 1 administrative person left in December 2018 to pursue further education and was replaced in May 2019. In addition, 1 technical staff was transferred to another part of DEQ at the individual's request in December 2018 and the Section hired 2 technical staff in April 2019. At the time of the meeting, the Section had no vacancies.

The Section has a training and qualification program that is consistent with NRC's Inspection Manual Chapter (IMC) 1248, "Qualification Programs for Federal and State Materials and Environmental Management Programs." Section management tracks continuing education requirements of 24 hours every 2 years for each technical staff.

### 2.2 Status of the Materials Inspection Program (2018 IMPEP Rating: Satisfactory)

Although NRC has updated the due date variances of Initial, Priority 1 and 2 inspections by  $\pm 50\%$  in addition to the due date variances of Priority 3, 4, 5 and 5R inspections by  $\pm 1$  year, the Section has kept the previous due date variances as specified in the previous version of IMC 2800. The Section made this decision to ensure that they would not be overdue on inspections. The Section has no overdue inspections currently. The Section performed 15 initial inspections all of which were completed on time.

The Section follows the most recent revision of IMC 2800, in that reciprocity inspections will be performed as time allows using a risk-informed approach.

**Recommendation:** The 2018 review team identified the following contributing factors for issuing inspection correspondence beyond 30 days:

1. Lack of effective management oversight over this performance metric.
2. No tracking system. A routing slip accompanies the inspection documentation, but there is no way to track the progress in real time.
3. A multi-layered approval process to issue a NOV. A Department lawyer must review all NOVs and senior management two levels above the Radiation Control Program Director must sign all NOVs.
4. Conservatively assessing the completion of the inspection. The program consistently measured the start of the 30-day window when inspectors left the

## Oklahoma Periodic Meeting

site. However, in some cases additional information was requested from the licensee and the report issuance clock was not reset when the inspectors received and reviewed the additional information.

The team recommended that the Section develop a strategy to address the contributing factors for issuing delinquent inspection documentation and assure that inspection documentation is issued within 30 days.

To address the above recommendation, some Section staff will restart the report issuance clock when requesting additional information to start after the information is received and reviewed. The agency continues to use a multi-layered review process and feel that it is an effective peer review process. During the current PHE, Section staff are discouraged from coming into the office. However, some Section staff choose to come into the office 1 day per week. In addition, during the PHE, the Section uses a peer review system internally and it is up to the inspector to track the report to make sure it does not exceed the issuance due date of 30 days. When an inspector electronically puts something in the Section Manager's or above's inbox within the peer review system to be reviewed, they will notify the manager accordingly.

### 2.3 Technical Quality of Inspections (2018 IMPEP Rating: Satisfactory)

The Section suspended most in-person inspections in March 2020, performing a few in-person critical inspections and for a brief period, several field inspections of industrial radiography at temporary job sites. The Section is doing remote inspections using Zoom and similar methods. They have two relatively new employees who were just beginning X-ray inspections as a step towards material inspections when the PHE started, and the restrictions on inspections have severely impeded their progress in building their skill. The new employees are using online training extensively but need real-world experience.

All inspection documentation is reviewed by the Section Manager as part of their usual review process. For logistical reasons, the actual signature on correspondence during the pandemic is usually done by higher-level management.

Supervisory accompaniments were performed each year for 2018 (6 inspectors) and 2019 (6 inspectors). Supervisory accompaniments for 2020 and 2021 have been put on hold due to the PHE. They will resume when in-person inspections resume which is estimated to be late 2022.

Two of the Section's biggest immediate challenges is conducting their inspection program and getting field experience and training for their junior staff during the pandemic.

### 2.4 Technical Quality of Licensing Actions (2018 IMPEP Rating: Satisfactory but needs Improvement)

The Section had approximately 224 specific licensees at the time of this periodic meeting. The Section had performed 401 licensing actions at the time of this meeting.

All licensing actions are reviewed by a peer license reviewer prior to having final approval and signature by the Section Manager. During the pandemic, a higher-level manager than the Section Manager, usually the Section Manager's supervisor, has signed the license in place of the Section Manager after remote review electronically by the Section Manager.

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The Section assigns priority levels one, two, or three to licensing actions depending on the type of licensing action (new, amendments, renewals, or terminations) in addition to the complexity of the action. The metric for completion of applications assigned priority one, two, or three is 30 days, 60 days, and 180 days, respectively. New applications and amendment actions are usually given priority one or two, depending on the complexity. The metric for renewals or terminations are normally assigned a priority three. During this meeting, it was noted that the Section had not issued large, complicated, or unusual authorizations for use of radioactive materials.

The Section is implementing the pre-licensing guidance and the checklist for Risk-Significant Radioactive Materials, as appropriate.

### 2.5 Technical Quality of Incident and Allegation Activities (2018 IMPEP Rating: Satisfactory)

Oklahoma has procedures and processes in place to maintain effective responses to incidents and allegations. The Section promptly conducted onsite inspections for most cases and the cases without an onsite inspection were handled appropriately.

At the time of this meeting, the Section had received nine events and seven of the events are closed. For one of the remaining two open events, an update has been sent to the Idaho National Laboratory with the appropriate supplemental information to close the event in the Nuclear Materials Events Database. The other remaining open event is still pending being closed.

Since the 2018 IMPEP review, four allegations were referred to the Section by the NRC.

### 3.0 NON-COMMON PERFORMANCE INDICATORS

Four non-common performance indicators are used to review Agreement State programs: (1) Legislation, Regulations and Other Program Elements, (2) Sealed Source and Device (SS&D) Evaluation Program, (3) Low-Level Radioactive Waste Disposal (LLRW) Program, and (4) Uranium Recovery (UR) Program. The NRC's Agreement with Oklahoma retains regulatory authority for SS&D, LLRW, and UR. Therefore, only the first non-common performance indicator applied to this meeting.

### 3.1 Legislation, Regulations and Other Program Elements (Formerly Compatibility Requirements) (2018 IMPEP Rating: Satisfactory)

Oklahoma's regulatory process is unchanged since the 2018 IMPEP. Rule changes are proposed, usually by the staff and they are considered by the Radiation Management Advisory Council (RMAC) for recommendation to the Environmental Quality Board (EQB). If approved by the EQB, then they must be approved by the legislature, and become effective when signed by the Governor. This is a lengthy process, the exact timeframe depends on when the process is started compared to when the legislature is in session, but 2 years is a good planning estimate.

The RMAC was briefed on NRC rules through the January 1, 2020, Code of Federal Regulations at a meeting on March 25, 2021, and it is expected that they will recommend the rules to the Board at their next meeting in September 2021. Assuming the Board approves the rules, they would go through the Legislative and Gubernatorial process, and most likely become effective in September 2022.

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At the time of the periodic meeting, the following amendment (Regulation Amendment Tracking Sheet (RATS) Identification [ID]) was overdue:

- RATS ID 2013-2: “Distribution of Source Material to Exempt Persons and to General Licensees and Revision of General License and Exemptions,” 10 CFR Parts 30, 40, and 70 amendment (78 FR 32310) that was due for Agreement State adoption by August 27, 2016. (Unresolved from the 2018 IMPEP report). The effective date that Oklahoma finalized this RATS ID was September 15, 2020.

The following regulations have been implemented timely by the Section. However, the Section must submit the final package addressing the outstanding comments for NRC review.

- RATS ID 2015-1: “Domestic Licensing of Special Nuclear Material – Written Reports and Clarifying Amendments,” 10 CFR Part 70 (79 FR 57721, 80 FR 143) that was due for Agreement State adoption by January 26, 2018. The effective date that Oklahoma finalized this RATS ID was September 15, 2017.
- RATS ID 2015-2: “Safeguards Information - Modified Handling Categorization, Change for Materials Facilities”, 10 CFR Parts 30, 37, 73, and 150 amendment (79 FR 58664, 80 FR 3865) that was due for Agreement State adoption by January 28, 2018. The effective date that Oklahoma finalized this RATS ID was September 15, 2017.
- RATS ID 2015-3: “Revisions to Transportation Safety Requirements and Harmonization with International Atomic Energy Agency Transportation Requirements”, 10 CFR Part 71 amendment (80 FR 33987) that was due for Agreement State adoption by August 15, 2020. The effective date that Oklahoma finalized this RATS ID was September 15, 2017.
- RATS ID 2015-4: “Miscellaneous Corrections,” 10 CFR Parts 37 and 40 amendment (80 FR 45841) that was due for Agreement State adoption by September 2, 2018. The effective date that Oklahoma finalized this RATS ID was September 15, 2017.
- RATS ID 2015-5: “Miscellaneous Corrections,” 10 CFR Parts 19, 20, 30, 32, 37, 40, 61, 70, 71, and 150 amendment (80 FR 74974) that was due for Agreement State adoption by December 31, 2018. The effective date that Oklahoma finalized this RATS ID was September 15, 2017.

## 4.0 SUMMARY

Within the scope of the periodic meeting, no programmatic concerns were noted at this time. The Oklahoma Agreement State Program is an effective and vital part of the Radiation Management Section. The Section continues to effectively manage its inspection and licensing activities in addition to responding to incidents and allegations, as appropriate, even during the COVID-19 PHE.

One of Oklahoma’s current initiatives is the Industrial Radiography Certification which shifted from mass tests administered by state staff to individual tests administered at commercial testing centers in October 2020.

The Section relies heavily on their extensive peer review system for licensing and inspections. As discussed in the 2018 IMPEP this can be an obstacle to fast turnaround; however, it is good for ensuring quality.